

## Safety Data Sheet

### 29 CFR 1910.1200

#### Section 1: Company and Product Identification

**Product Name:** Tris(triphenylphosphinegold)oxonium tetrafluoroborate

**Product Code:** 2040

**Company:** Colonial Metals, Inc.  
 Building 20  
 505 Blue Ball Road  
 Elkton, MD 21921 United States  
 Company Contact: EHS Director  
 Telephone Number: 410-398-7200  
 FAX Number: 410-398-2918  
 E-Mail : info@colonialmetals.com  
 Web Site: www.colonialmetals.com  
 Supplier Emergency Contacts & Phone Number  
**Emergency Response:**  
 Chemtrec: 800-424-9300  
 World Wide - Call COLLECT to U.S: 703-527-3887



www.colonialmetals.com

#### Section 2: Hazards Identification

GHS07

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**Hazard Pictograms:**



**Signal Word:**

Warning

**Hazard Category:**

Serious eye damage/eye irritation Cat 2  
 Skin corrosion/irritation Cat 2  
 Acute tox, oral Cat 5  
 Specific target organ tox, single exp. Cat 3 (resp irrit)

**Hazard Statements:**

H319: Causes serious eye irritation  
 H315: Causes skin irritation  
 H303: May be harmful if swallowed  
 H335: May cause respiratory irritation  
 P261: Avoid breathing dust/fume/gas/mist/vapours/spray  
 P302+350: IF ON SKIN: Gently wash with plenty of soap and water  
 P337+313: If eye irritation persists get medical advice/attention  
 P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting  
 P304+341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing  
 P501: Dispose of contents/container in accordance with local/regional/national/international rules.  
 P405: Store locked up

**Hazards not otherwise classified:**

To the best of our knowledge, these chemical, physical & toxicological properties have not been thoroughly investigated. Avoid elevated temperature. Product incompatible with mineral acids and organic reducing agents.  
 May decompose chlorine vapors.

#### Section 3: Composition / Information on Ingredients

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Tris(triphenylphosphinegold)oxonium	Irritant	53317-87-6	
<b>Product Name:</b> Tris(triphenylphosphinegold)oxonium			
<b>Chemical Formula:</b> C <sub>54</sub> H <sub>45</sub> P <sub>3</sub> O <sub>3</sub> Au <sub>3</sub> BF <sub>4</sub>			

**Section 4: First Aid Measures**

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**General Info:** Ensure proper ventilation. Material is irritating to the tissue of the mucous membranes and upper respiratory tract. May be harmful if inhaled

**Notable Exposure symptoms:** Irritation to skin, eyes and areas of contact.

**If ingested:** Rinse mouth. Seek immediate medical attention. Clear the airway and administer artificial respiration if not breathing.  
If swallowed, do not induce vomiting unless directed to do so by medical personnel.

**If inhaled:** Remove the victim from the contaminated area while protecting yourself from exposure by wearing an appropriate respirator. Put a similar respirator on the victim if possible. Get medical attention immediately.

**Eye contact:** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Get immediate medical attention.

**Skin contact:** Take off immediately all contaminated clothing. Rinse with water thoroughly. Get immediate medical assistance if irritation develops or persists.

**Additional Info:** Observe for any symptoms for several hours after exposure. Follow up with medical attention if symptoms develop.

**Section 5: Fire Fighting Measures**

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**General Info:** Use proper safety equipment. If this product is involved in a fire Hydrogen chloride and metal oxide fume can be released.

**Extinguishing Method / Equipment:** Use CO<sub>2</sub> (Carbon Dioxide), dry chemical, or foam.

**Hazardous Decomposition Info:** Carbon oxides, Oxides of phosphorus, Hydrogen fluoride, Borane/boron oxides

**Section 6: Accidental Release Measures**

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**Personal precautions, protective equipment and procedures:** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment (SCBA) and clothing during clean-up. Avoid breathing vapor. Ventilate area if easy to do so and wash spill site after clean up is complete. Contact local authorities if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Containment Equipment and Procedures:** Do not let product enter drains. Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**Cleanup Procedures:** Collect all contaminated media, or other cleanup materials into a waste receptacle. If cleaning surface is necessary, utilize vacuum cleaner, provided adequate ventilation is available.

**Section 7: Handling and Storage**

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**Safe Handling Precautions:** Do not handle until all safety precautions have been read and understood. Keep containers tightly closed. Ensure adequate ventilation. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment and wash thoroughly after handling.

**Work/Hygienic Practices:** Always use good personal hygiene after handling

**Recommendations for Storage:** Store cold, in a tightly sealed container under an inert atmosphere.

**Section 8: Exposure Control / Personal Protection**

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**General / Engineering Controls:** Ventilation: Local Exhaust: Required in handling area  
Mechanical: Desirable to insure concentration of material below TLV/TWA levels  
Other: Closed ventilation system (Laboratory Fume Hood)

**Work Clothing:** Protective work clothing which covers skin and prevents exposures. Lab coat/apron, flame and chemical resistant protective clothing, eye wash, safety shower, and hygiene facilities for washing.

**Eye/face protection:** Wear safety glasses with side shields or goggles or face shield.

**Skin Protection:** Wear chemical resistant gloves.

**Respiratory Protection:** NIOSH approved chemical cartridge respirator for acid gas/chlorine (42 CFR part 84) and self-contained breathing apparatus with full face shield.

**Section 9: Physical and Chemical Properties**

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<b>State:</b> Solid Powder	<b>Melting Point:</b> N/A	<b>Freezing Point:</b> N/A
<b>Color:</b> White	<b>Boiling Point/Range:</b> N/A	<b>pH:</b> N/A
<b>Molecular Wt.:</b> 1,480.56 g/mol	<b>Odor:</b> None	<b>Water Solubility:</b> N/A
<b>Evaporation rate:</b> N/A	<b>Flash Point:</b> N/A	<b>Part. Coeff (n-octanol/water):</b> N/A
<b>Upper Flam Limits:</b> N/A	<b>Lower Flam Limits:</b> N/A	<b>Vapor Pressure:</b> N/A

**Section 10: Stability and Reactivity**

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**General:** This product is stable and non-reactive under normal conditions of use. Product is not subject to hazardous polymerization. Avoid open flame and ignition sources.

**Conditions To Avoid (Stability):** Light and moisture (store cold)

**Incompatible materials:** No Data Available

**Decomposition products:** Carbon oxides, Oxides of phosphorus, Hydrogen fluoride, Borane/boron oxides

**Section 11: Toxicological Information**

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**General Information:** To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

**Section 12: Ecological Information**

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**Aquatic toxicity:** No Data Available

**Section 13: Disposal Information**

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**Product disposal:** Consult Federal EPA, State and local regulations for proper disposal/recycle/reclamation

**Container disposal:** Treat empty containers with extra care. Consult waste contractor.

**Other considerations:** NOTE: Chemical additions, processing, or otherwise altering this material may make the waste management information presented above incomplete, inaccurate, or otherwise inappropriate.

**Section 14: Transport Information**

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**DOT:** Non- Hazardous/Not Dangerous Goods

**Section 15: Regulatory Information**

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**SARA Section 302 Components**

**Notification:** SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard

**Right To Know Massachusetts Right To Know Components**

**Components:** No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

Tris(triphenylphosphinegold)oxonium tetrafluoroborate CAS-No. 53317-87-6 Revision Date

**New Jersey Right To Know Components**

Tris(triphenylphosphinegold)oxonium tetrafluoroborate CAS-No. 53317-87-6 Revision Date

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm

**Section 16: Other Information**

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**NFPA Rating**

Health: 2  
Fire: 0  
Reactivity: 0

**HMIS Rating**

Health: 2  
Fire: 0  
Reactivity: 0  
Personal  
Protection: C

**Disclaimer:** *In compliance with the OSHA Hazard communication Standard, 2.9 C.F.R 1910.1200, we are providing you with a Materials Safety Data Sheet (MSDS) for the hazardous material you are purchasing.*

*It is your responsibility to educate your employees on the safe use of the hazardous material. With this in mind, a copy should be forwarded to the supervisor of the user or to the user themselves, and copy should be retained in your files for future reference.*

*Colonial Metals, Inc. makes no presentation as to the accuracy of the information in the MSDS. The information is believe to be correct; however, you (the customer), should preform your own investigation and independent verification. If you resell the product, you are responsible to forward the information in the MSDS to your customer.*

*Colonial Metals, Inc.*

**Version Date:** 8/29/2016